## Rabies Awareness

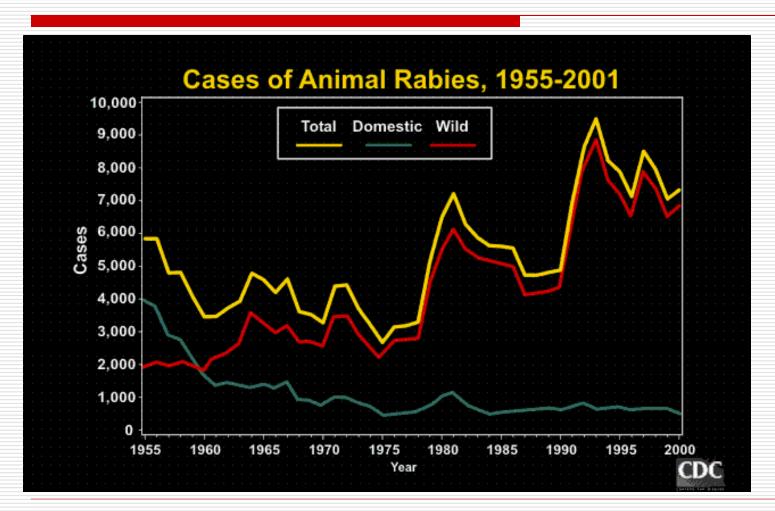
### **General Information**

- Rabies is a viral disease that affects warm-blooded animals.
- It is most often transmitted through a bite from a rabid animal (via infected saliva or through mucus membranes).
- Rabies cannot be transmitted through blood, urine, or feces.

### **Carriers of Rabies**

- In the U.S., most rabies cases occur in wild animals such as raccoons, skunks, bats, foxes, and coyotes.
- Domestic animals account for less than 10% of reported rabies cases.

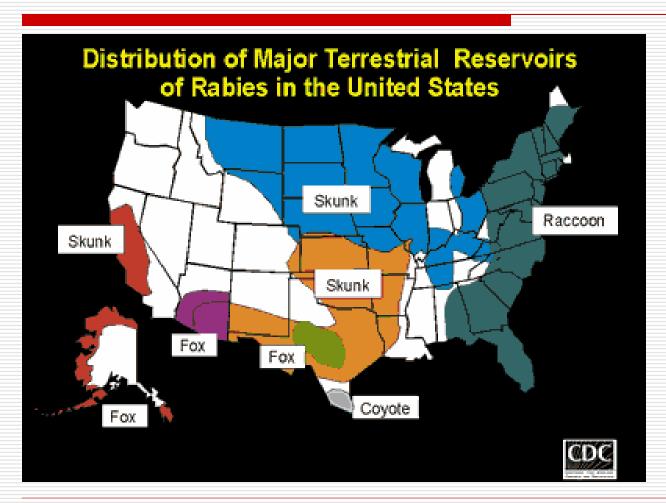
Domestic animal rabies has dramatically declined because of mandatory vaccination laws for dogs and cats.



## In the U.S.,

- □ There are 7,000-8,000 positive animals per year.
- There are four main strains of rabies virus: raccoon, skunk, bat, and fox.
- There are 2-5 human cases per year, mostly from bat exposures.

There is an increased threat of rabies in Hamilton County due to the progression of raccoon rabies strain into our area.



### Possible Routes of Exposure

- A bite or scratch from a potentially rabid animal.
- If an open wound comes in contact with the saliva or central nervous system (CNS) tissue of a potentially rabid animal. CNS tissue includes the brain and spinal cord.
- ☐ If a **mucous membrane** (eyes, nose, mouth) comes in contact with the saliva or CNS tissue of a potentially rabid animal.
- Bat exposure, even in the absence of a demonstrable bite or scratch. Ex. When a bat has been observed in a room with a sleeping child or mentally impaired person.

Any potentially rabid animal that is not available for testing is presumed rabid.

## What to do if you are exposed

- Wash the affected area with soap and water for at least 5 minutes.
- Seek medical attention immediately.
- Make sure tetanus immunization is up-todate.
- Report exposure to Health Department as soon as possible.

## Post exposure prophylaxis (PEP) may be needed:

If the domestic dog, cat, or ferret appears ill or has unusual behavior.

OR

The exposure is from a bat, raccoon, fox, skunk, coyote, or other wild animal.

AND, the animal tests positive for rabies or is unavailable for testing.

#### PEP consists of:

- A human rabies immune globulin (HRIG) shot on the day of exposure or soon thereafter.
- A series of 5 rabies vaccine shots.



#### Infection Process

The rabies virus infects the central nervous system causing acute encephalitis.

The outcome is almost always fatal if the patient does not receive PEP.

#### Figure 1. The infectious path of rabies virus

- The virus incubates in raccoon's body for approximately 3-12 weeks.
  The raccoon has no signs of illness during this time.
- Rabies virus spreads through the nerves to the spinal cord and brain.
- Rabies virus enters the raccoon through infected saliva.



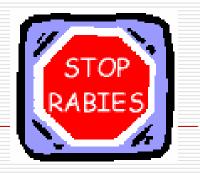
 Raccoon is bitten by a rabid animal.

- 5. When it reaches the brain, the virus multiplies rapidly, passes to the salivary glands, and the raccoon begins to show signs disease.
- The infected animal usually dies within 7 days of becoming sick.

Source: CDC,

http://www.cdc.gov/ncidod/dvrd/rabies/natural\_history/nathist.htm

### Help prevent rabies



- Stay away from, and do not touch or feed wild animals.
- Be cautious of stray dogs and cats, especially those acting unusual or ill.
- Vaccinate your pets. Vaccinated pets provide a buffer zone of protection from wildlife rabies.

## What is the Chattanooga-Hamilton County Health Department doing?

- We provide rabies vaccine (pre-exposure) for people.
- We follow-up on all animal bite reports in Hamilton County.
- We educate the public about rabies.
- We coordinate rabies clinics.
- We have an environmentalist on call 24 hours a day.

# We also participate in the state ORV program.

- This is a program to immunize wild raccoons for rabies.
- The oral rabies vaccine (ORV) is placed inside a bait of fishmeal and fish oil.
- The baits are distributed by hand and by aircraft throughout the county.
- When raccoons eat the bait, they ingest the oral rabies vaccine and become vaccinated.

## Other Resources in Hamilton County:

- City of Chattanooga Neighborhood Services through its Animal Services
- Chattanooga Humane Educational Society
- Local Veterinarians
- USDA Wildlife Services
- □ Tennessee Wildlife Resources Agency
- Tennessee Department of Health